

WE CLAIM:

1. A writing instrument comprising: a tubular member having a longitudinal axis and an aperture at an end thereof; a writing component mounted in the tubular member and having a writing tip at an end portion thereof, the tubular member and the writing component being movable relative to one another in axial directions along the longitudinal axis of the tubular member between a writing position at which the writing tip protrudes from the aperture of the tubular member and a housed position at which the writing tip is disposed in the tubular member; and an airtight sleeve connected to the end portion of the writing component for movement between an advanced position and a retracted position, the airtight sleeve having a bore through which the end portion of the writing component passes during movement of the writing component between the writing position and the housed position.

2. A writing instrument according to claim 1; further comprising a cap plate pivotally connected to the airtight sleeve for opening and closing the bore of the airtight sleeve.

3. A writing instrument according to claim 2; further comprising a projecting rib connected to the cap plate so that when the airtight sleeve moves from the advanced position to the retracted position, the projecting rib abuts an inner surface of the tubular member so as to pivot the cap plate in such a

direction that the cap plate closes the bore of the airtight sleeve.

4. A writing instrument according to claim 3; wherein the tubular member has a window hole into which the projecting rib projects when the airtight sleeve moves from the retracted position to the advanced position to allow the cap plate to pivot in a direction to open the bore of the airtight sleeve.

5. A writing instrument according to claim 4; wherein the writing component has a shoulder located behind the writing tip; and wherein the airtight sleeve has an inner raised portion for engaging with the shoulder of the writing component with an airtight contact when the airtight sleeve is located at the retracted position and for disengaging from the shoulder of the writing component when the airtight sleeve is located at the advanced position.

6. A writing instrument according to claim 1; wherein an edge of the airtight sleeve proximate the bore thereof is disposed at an oblique angle relative to a longitudinal axis of the airtight sleeve.

7. A writing instrument according to claim 1; wherein the airtight sleeve has a flange disposed at a rear portion thereof; and wherein the tubular member has a stop element for engaging the flange of the airtight sleeve to limit movement of

the airtight sleeve from the retracted position to the advanced position.

8. A writing instrument according to claim 1; wherein the airtight sleeve has a generally rectangular-shaped portion connected to the flange.

9. A writing instrument according to claim 1; wherein the tubular member has a main body and a front piece connected to the main body; and wherein the airtight sleeve is disposed in the front piece of the tubular member.

10. A writing instrument according to claim 9; wherein the writing component has a lock portion; and wherein the main body of the tubular member has a plurality of engagement portions each for respective engagement with the lock portion of the writing component at the writing position and at the housed position of the writing component.

11. A writing instrument according to claim 9; further comprising a holding member disposed in the main body of the tubular member for elastically supporting the writing component.

12. A writing instrument according to claim 9; wherein the airtight sleeve has a projection; and wherein the front piece of the tubular member has a guide groove extending in the axial direction for receiving the projection of the airtight sleeve.

13. A writing instrument according to claim 9; wherein the airtight sleeve has a flange disposed at a rear portion thereof; and wherein the tubular member has a stop element disposed at a rear portion of the front piece for engaging the flange of the airtight sleeve to limit movement of the airtight sleeve from the retracted position to the advanced position.

14. A writing instrument according to claim 1; further comprising a rotating cam-type feeding mechanism disposed in the tubular member for moving the writing component in the axial directions.

15. A writing instrument according to claim 14; wherein the tubular member has a main body and a front piece connected to the main body; and wherein the airtight sleeve is disposed in the front piece of the tubular member.

16. A writing instrument according to claim 15; wherein the rotating cam-type feeding mechanism comprises a rotational cam connected to the writing component for undergoing rotational movement and movement in the axial directions, an outer cam having a cam groove for guiding movement of the rotational cam in the axial direction, and a guide cam connected to a rear end of the front piece of the tubular body and having a cam element for rotating the rotational cam.

17. A writing instrument according to claim 15; wherein the airtight sleeve has a projection; and wherein the front piece of the tubular member has a guide groove extending in the axial direction for receiving the projection of the airtight sleeve.

18. A writing instrument according to claim 15; wherein the airtight sleeve has a flange disposed at a rear portion thereof; and wherein the tubular member has a stop element disposed at a rear portion of the front piece for engaging the flange of the airtight sleeve to limit movement of the airtight sleeve from the retracted position to the advanced position.

19. A writing instrument according to claim 1; further comprising a cap plate pivotally connected to the airtight sleeve for opening and closing the bore of the airtight sleeve, and a generally triangular-shaped projecting rib connected to a central portion of the cap plate so that when the airtight sleeve moves from the advanced position to the retracted position, the projecting rib abuts an inner surface of the tubular member so as to pivot the cap plate in such a direction that the cap plate is pressed against and closes the bore of the airtight sleeve.

20. A writing instrument according to claim 1; further comprising a cap plate pivotally connected to the airtight sleeve for opening and closing the bore of the airtight sleeve, and an elastic projecting rib connected to the cap plate so that when

the airtight sleeve moves from the advanced position to the retracted position, the projecting rib abuts an inner surface of the tubular member so as to pivot the cap plate in such a direction that the cap plate is pressed against and closes the bore of the airtight sleeve.

21. A writing instrument comprising: a tubular member having a longitudinal axis and an aperture at an end thereof; a writing component having a writing tip and mounted in the tubular member for undergoing movement therein in directions along the longitudinal axis between a writing position at which the writing tip protrudes from the aperture of the tubular member and a housed position at which the writing tip is disposed in the tubular member; and an airtight sleeve disposed in the tubular member for undergoing movement between an advanced position and a retracted position during movement of the writing component between the writing and housed positions, respectively, the airtight sleeve having an interior space defining an airtight chamber surrounding the writing tip of the writing component when the writing component is in the housed position, and the airtight sleeve having a bore through which the writing tip of the writing component passes during movement of the writing component between the writing position and the housed position.

22. A writing instrument according to claim 21; wherein the airtight sleeve has a hinged plate for undergoing pivotal movement to open and close the bore of the airtight sleeve.

23. A writing instrument according to claim 22; wherein the airtight sleeve has a projecting rib connected to the hinged plate so that when the airtight sleeve moves from the advanced position to the retracted position, the projecting rib abuts an inner surface of the tubular member so as to pivot the hinged plate in such a direction that the hinged plate closes the bore of the airtight sleeve.

24. A writing instrument according to claim 23; wherein the tubular member has a window hole into which the projecting rib projects when the airtight sleeve moves from the retracted position to the advanced position to allow the hinged plate to pivot in a direction to open the bore of the airtight sleeve.

25. A writing instrument according to claim 24; wherein the writing component has a shoulder located behind the writing tip; and wherein the airtight sleeve has an inner raised portion for engaging the shoulder of the writing component with an airtight contact when the airtight sleeve is located at the retracted position and for disengaging the shoulder of the writing component when the airtight sleeve is located at the advanced position.